

**DEPARTMENT OF WATER RESOURCES
ENCROACHMENT PERMIT PROGRAM
EP PLAN SET GUIDANCE**

General:

- For a more complete plan submittal, read and incorporate the relevant sections of the California Code of Regulations Title 23, Division 2, Chapter 6 - Encroachments, into the design plans.
- Ensure the design plans are consistent with the description of the proposed encroachment(s) in Section B.3 and Section C.2 of the EP application. Work not within Right of Way and described in Section B.3 and Section C.2 should not be on the plans.
- Plan set to include all staging and stockpile areas with the necessary temporary access route(s). This information provides DWR reviewers with the ability to determine temporary impacts to DWR Facilities, operations and maintenance.
- Type and weight of the construction equipment to be used within the DWR right of way are listed on the plans. This information provides a better understanding of the additional loading on DWR facilities and may be required to calculate impacts.

Drafting:

- Every plan sheet includes a north arrow, scale, and legend. Plan set includes a vicinity map showing where the proposed work is located.
- Plans submitted with the EP application should be final (100%) design plans for construction with the original California registered professional engineer's stamp and signature. California Code of Regulations §610.1(b)(2)
- All plan sheets include the DWR Right of Way with accurate and easily recognizable boundary, dimensions, and callouts per California Code of Regulations §610.1 (b)(3) See GIS link below for DWR Right of Way and Parcels.
<https://dwr.maps.arcgis.com/apps/webappviewer/index.html?id=d139ce32be9e43059b932c21521acfe1>
- Show and callout all existing DWR facilities (with DWR stationing) per DWR as-built, and/or field surveys to include size, dimension, and verified location. Where applicable, each plan sheet with DWR facilities to include dimension or distance to all proposed work. California Code of Regulations §610.1(b)(5) DWR

As-builts should be requested from DWR via email at swp.encroachments@water.ca.gov.

- All existing (non-DWR) facilities within DWR right of way are shown and called out on the design plans.
- Plans are legible and clearly differentiate between proposed and existing facilities/features.
- A legend defining all line types and symbols is included, with definitions of all abbreviations used.

Design:

- Plan, Profile and Cross-section details including horizontal and vertical distance between the proposed work and the DWR facilities.
- Grading Plans (if applicable) showing existing and final contours.
- Utility Encroachments:
 - Excavation trench or shoring details including length, width and depth.
 - Type of proposed pipe product (PVC, HDPE, Steel, etc.)
 - Identification of manholes and vaults.
 - Horizontal Directional Drilling and Jack & Bore (if applicable): The bore pits shall be outside DWR right of way and their location shall be clearly shown on the plans.
 - Provide a plan and profile view detail for the proposed utility showing horizontal and vertical alignments. Callout the horizontal and vertical clearances between the proposed utilities to be installed and the DWR facilities.
 - Please note that all utilities crossing under State Water Project's pipeline shall be installed using HDD or boring/jacking method. Open excavation will not be allowed.
 - For utility crossing above and below DWR pipeline, canal, communication cable, or facility, include the vertical and/or horizontal clearances (based off potholing) from proposed crossing to DWR facility. For all pothole requests, contact DWR Real Estate Branch at swp.encroachments@water.ca.gov for processes and procedures.

Potholed location of these utilities pursuant to California Code of Regulations §612.6(a)(3) and §612.6(a)(4).

- If project includes a utility trench within DWR right of way, a trench cross-section detail is included with trench dimensions, backfill material and compaction, proposed utilities, warning tape notes, red-dyed concrete (electrical conduits only), clearances between the proposed utility and DWR facilities.
- Landscaping Encroachments:
 - Landscaping plans including a plant legend showing botanical names and common names, quantities, plant sizes and other planting descriptions.
 - Irrigation plans indicating pipe size, type, depth and location of laterals and mainlines.
 - Clarify if any trees will be removed from DWR right of way near DWR pipeline and communication cable.
- Any excavation trenches within DWR right of way that cannot be properly backfilled within a work day shall be covered with proper thickness and size steel plates to allow DWR vehicular traffic (HS20-44 truck loading) across the trench.
- If the proposed work will result in an outage and/or interruption to any DWR Facilities or operations and maintenance activities, the design plans should include details or notes describing the DWR facility impacted, the outage timeline and duration.
- For utility poles and overhead lines: coordinates (Lat, Long), sag detail(s) with ground clearance to overhead lines, location of the required marker warning signage are included on the design plans for each pole location where work is proposed within the DWR right of way.
 - Clearly show the clearances from the proposed poles, anchors, and overhead lines to the DWR facilities (i.e. Aqueduct, communication cables, roads, pipelines etc.).
 - Plans shall show the depth of the proposed poles and anchors.
 - Minimum 25' clearance over roads/land, and minimum 20' clearance over open water.
- Clarify if DWR fence will need to be removed and replaced for access to construction site and show the limits of fence removal on the plans. For DWR fence/gate replacement or relocation projects, standard fencing/gate details should be requested from DWR via email at swp.encroachments@water.ca.gov.

- Provide all technical reports that have been prepared for the specific project, including but not limited to, Geotechnical Investigation report, Hydrology or Drainage report, boring logs, potholing report, design calculations...etc.

DWR Standard Construction Notes:

- The following notes shall be placed on each construction plan sheet where work will be performed within the Department of Water Resources right-of-way:
 - A SEVEN (7) DAY ADVANCE NOTIFICATION IS REQUIRED PRIOR TO STARTING WORK WITHIN THE DEPARTMENT OF WATER RESOURCES (DWR) RIGHT-OF-WAY. CONTACT THE DEPARTMENT OF WATER RESOURCES, DIVISION OF ENGINEERING, ENCROACHMENT PERMIT SECTION, SACRAMENTO, CALIFORNIA AT (800) 600-4397. THE FIELD DIVISION SHALL BE SIMULTANEOUSLY NOTIFIED AT BY THE PERMITTEE.
 - MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT IN PLACE ALL STATE WATER PROJECT (SWP) FACILITIES AND APPURTENANCES, INCLUDING BUT NOT LIMITED TO COMMUNICATION AND CONTROL CABLES AND CATHODIC PROTECTION TEST STATIONS. THE PERMITTEE AND CONTRACTOR WILL BE LIABLE FOR ALL DAMAGES TO SWP FACILITIES AND APPURTENANCES AS A RESULT OF THE CONSTRUCTION, AND FOR ANY OTHER DAMAGES OR LOSSES SUFFERED BY DWR OR ITS WATER CONTRACTORS, INCLUDING POWER, IRRIGATION, MUNICIPAL AND INDUSTRIAL WATER SUPPLY, AND COMMUNICATION LOSSES.
 - STORAGE AND PLACEMENT OF CONSTRUCTION EQUIPMENT AND MATERIALS OVER DWR PIPELINE OR WITHIN DWR RIGHT-OF-WAY IS NOT ALLOWED.
 - IN THE EVENT OF A SPILL OR OTHER INCIDENT WITHIN DWR RIGHT OF WAY THE FIELD DIVISION AREA CONTROL CENTER (ACC) SHALL BE CONTACTED IMMEDIATELY AT
 - THE PERMITTEE AND CONTRACTOR SHALL PREVENT CONTAMINATION OF THE WATER IN THE AQUEDUCT OR SWP RIGHT-OF-WAY DURING CONSTRUCTION.

- PRIOR TO CONSTRUCTION, THE CONDITION OF DWR ROADS, FENCES, AND DWR LAND AREAS ADJACENT TO THE PROPOSED PROJECT AREA SHALL BE JOINTLY INSPECTED AND DOCUMENTED BY THE PERMITTEE AND DWR PERSONNEL. UPON COMPLETION OF THE PROPOSED CONSTRUCTION ACTIVITIES, THE CONDITION OF THESE FEATURES SHALL BE JOINTLY RE-INSPECTED. THE PERMITTEE SHALL BE LIABLE FOR ALL COSTS ASSOCIATED WITH RESTORING THESE FEATURES TO PRE-CONSTRUCTION CONDITIONS.
- ONGOING DWR OPERATIONS AND MAINTENANCE ACTIVITIES SHALL NOT BE DISRUPTED DURING CONSTRUCTION. THE PERMITTEE AND CONTRACTOR SHALL MAINTAIN DWR ACCESS THROUGH THE WORKSITE AT ALL TIMES.
- UPON COMPLETION OF THE WORK UNDER THE ENCROACHMENT PERMIT, ALL WASTE MATERIAL, DEBRIS, ETC., SHALL BE REMOVED FROM DWR RIGHT-OF-WAY. THE PERMITTEE SHALL BE LIABLE FOR ALL COSTS ASSOCIATED WITH RETURNING THE SITE TO THE PRECONSTRUCTION CONDITIONS.
- COMMUNICATION AND CONTROL CABLES CONNECTED WITH THE OPERATION OF THE STATE WATER PROJECT ARE BURIED ALONG EITHER OR BOTH SIDES OF THE AQUEDUCT/PIPELINE WITHIN DWR RIGHT-OF-WAY, AS APPROXIMATELY DEPICTED ON THIS PLAN. PRIOR TO ANY EXCAVATION IN THIS AREA, THE CABLE(S) SHALL BE LOCATED AND EXPOSED BY POTHOLING IN THE PRESENCE OF A DWR FIELD DIVISION REPRESENTATIVE. CALL AT LEAST SEVEN (7) DAYS IN ADVANCE FOR AN APPOINTMENT. ALL EXCAVATIONS WITHIN THREE (3) FEET OF THE CABLE(S) SHALL BE DONE USING HANDHELD TOOLS ONLY.

If trench excavation is proposed within the DWR right-of-way, include the following note:

- ALL TRENCH EXCAVATION SHALL COMPLY WITH THE MOST CURRENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS. TRENCH BACKFILL SHALL BE PLACED IN NO GREATER THAN 4-INCH LIFTS IF HAND COMPACTED OR NO GREATER THAN 8-INCH LIFTS IF POWER COMPACTED. TRENCH BACKFILL WITHIN DEPARTMENT OF WATER RESOURCES RIGHT-OF-WAY SHALL BE COMPACTED TO 95 PERCENT RELATIVE COMPACTION (ASTM D1557-12).

Field Division (FD) Phone Nos.– *Use as reference when selecting the applicable field division phone number from drop down list in the DWR Standard Notes above.*

(530) 534-2492, Oroville FD (*Butte County*)

(209) 833-2180, Delta FD (*Alameda, Santa Clara, Napa, and Solano Counties*)

(209) 827-5300, San Luis Field Division (*Merced, Fresno, and San Benito Counties*)

(661) 858-5750, San Joaquin FD (*Kern, Kings, San Luis Obispo, and Santa Barbara Counties*)

(661) 944-8600, Southern FD (*Los Angeles, Riverside, and San Bernardino Counties*)

For more information on DWR's Encroachment Permit Program, requirements, and documents, please see <https://water.ca.gov/Work-With-Us/Real-Estate/Encroachment-Permits>